

Amendments to the Claims

Claims 1-53 (Cancelled)

Claim 54 (Currently Amended): A type I polyketide synthase which produces a polyketide and which comprises a loading module and a plurality of extension modules, wherein:

a) said loading module loads an optionally substituted malonyl and then effects decarboxylation of the loaded moiety to provide a corresponding optionally substituted acetyl moiety for transfer to the first of said extension modules; and

b) said loading module is of the form:

(engineered-KSq)-(AT)-(ACP), wherein:

i) ACP is an acyl carrier protein domain;

ii) AT is an acyltransferase domain which loads an optionally substituted malonyl; and

iii) engineered-KSq is a ketosynthase (KS) domain which has been genetically engineered to effects decarboxylation of a loaded optionally substituted malonyl by mutating the active site cysteine residue to a glutamine residue, wherein said engineered-KSq domain is obtained by replacing the active site cysteine of a KS domain of an extension module with a glutamine; and

~~e) at least the first of said extension modules is not naturally associated with said loading module,~~

wherein the polyketide produced by the polyketide synthase is other than a 14-membered macrolide having a 13-methyl group due to incorporation of an unsubstituted acetate starter.

Claim 55 (Previously Presented): A type I polyketide synthase according to claim 54, wherein said acyltransferase domain has an arginine residue in the active site.

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